



PERINATAL HEPATITIS B PREVENTION

An Overview of the Minnesota Department of Health's Perinatal Hepatitis B Prevention Program



Presented by Adele L. Clobes, RN, CNM, MSN

Perinatal Hepatitis B Program Coordinator, MDH



Objectives

- Participants will be able to discuss:
 - General statistics about the distribution of births to hepatitis B positive mothers & the multicultural aspects of Minnesota's populations
 - Innovative aspects of the Perinatal Hepatitis B Prevention Program
 - Vision for the future of the Minnesota Perinatal Hepatitis B Program

General Statistics about Minnesota's Populations



Minnesota's Population

- According to the U.S. Census Bureau the estimated population in Minnesota in 2005 was 5,132,799

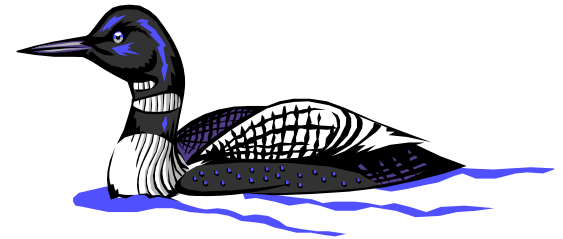
Minnesota Factoid #1: Did you know that Minnesota is known as the land of 10,000 lakes?



Minnesota's Birth Rate

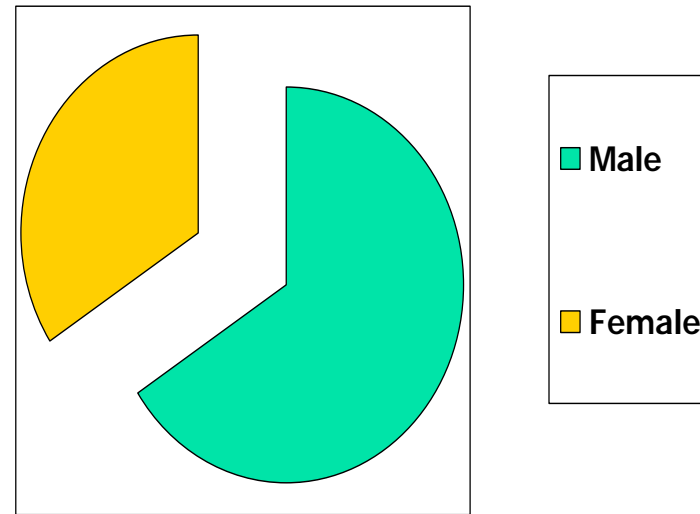
- The birth rate for the year 2005 was 70,920

- Minnesota Factoid #2: Did you know the Minnesota State Bird is the Loon?

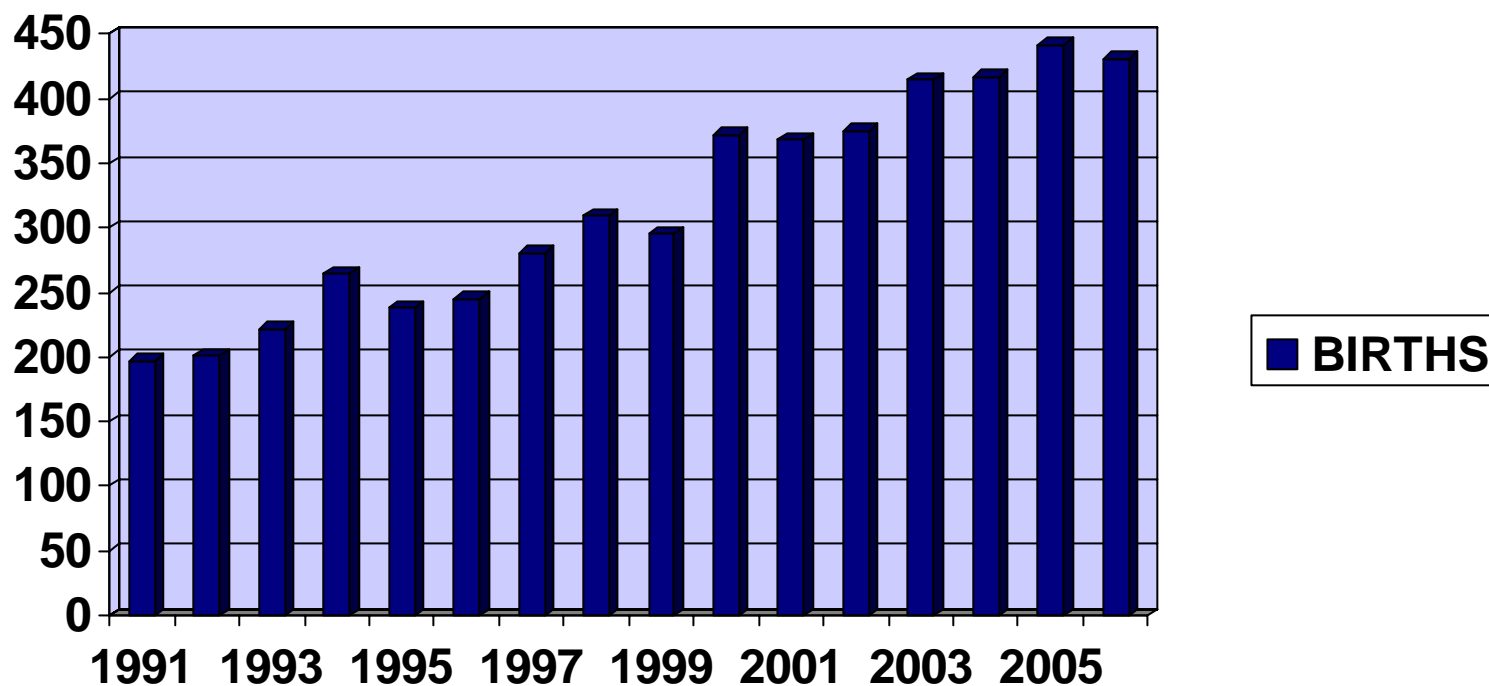


Hepatitis B Chronic Cases in Minnesota

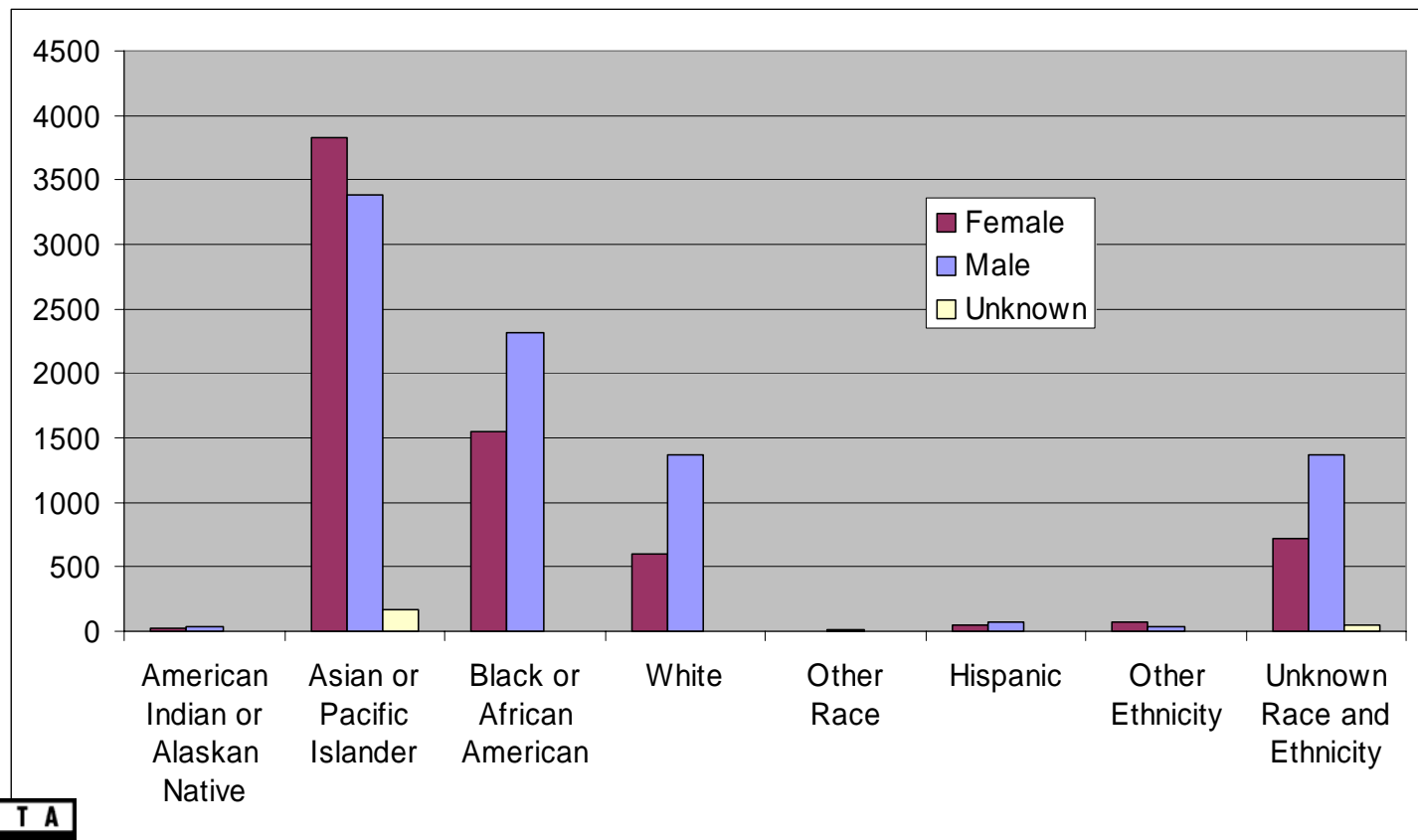
As of the December 2006, there are 16,412 cases of chronic hepatitis B infection. One third of these cases occur in women of childbearing age (n=5625).



Infants Born to HBsAg Positive Mothers 1991-2006



Race/Ethnic Distribution of HBsAg Positive Individuals as of 2005



Ethnicity of Minnesota Infants Born to HBsAg Positive Mothers in 2005



East Asia: China, Hong Kong, Japan,
Korea, Taiwan

South Asia: India, Tibet

Southeast Asia: Burma, Cambodia,
Laos, Philippines, Thailand, Vietnam
Malaysia

South Pacific: Marshall Islands

Middle East: Turkey, Palestine

Ethnicity of Minnesota Infants Born to HBsAg Positive Mothers in 2005



East Africa:

Ethiopia(Oromo),Somalia

West Africa: Liberia, Nigeria, Togo,
Sierra Leon, Ghana

Central Africa: Sudan

Eastern Europe + Northern Asia:

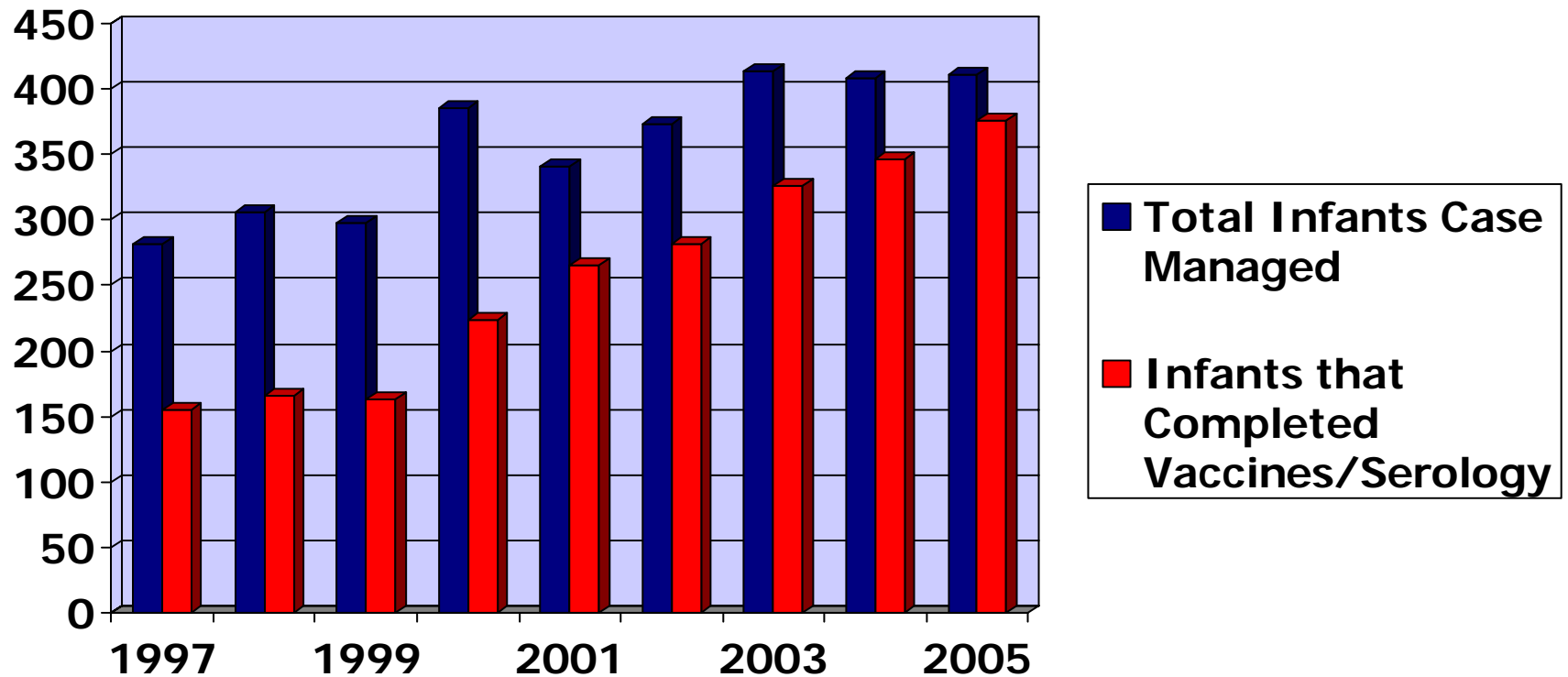
Slovak Republic, Russia, Ukraine

Mexico & Central America: Mexico,
Honduras

South America: Guyana

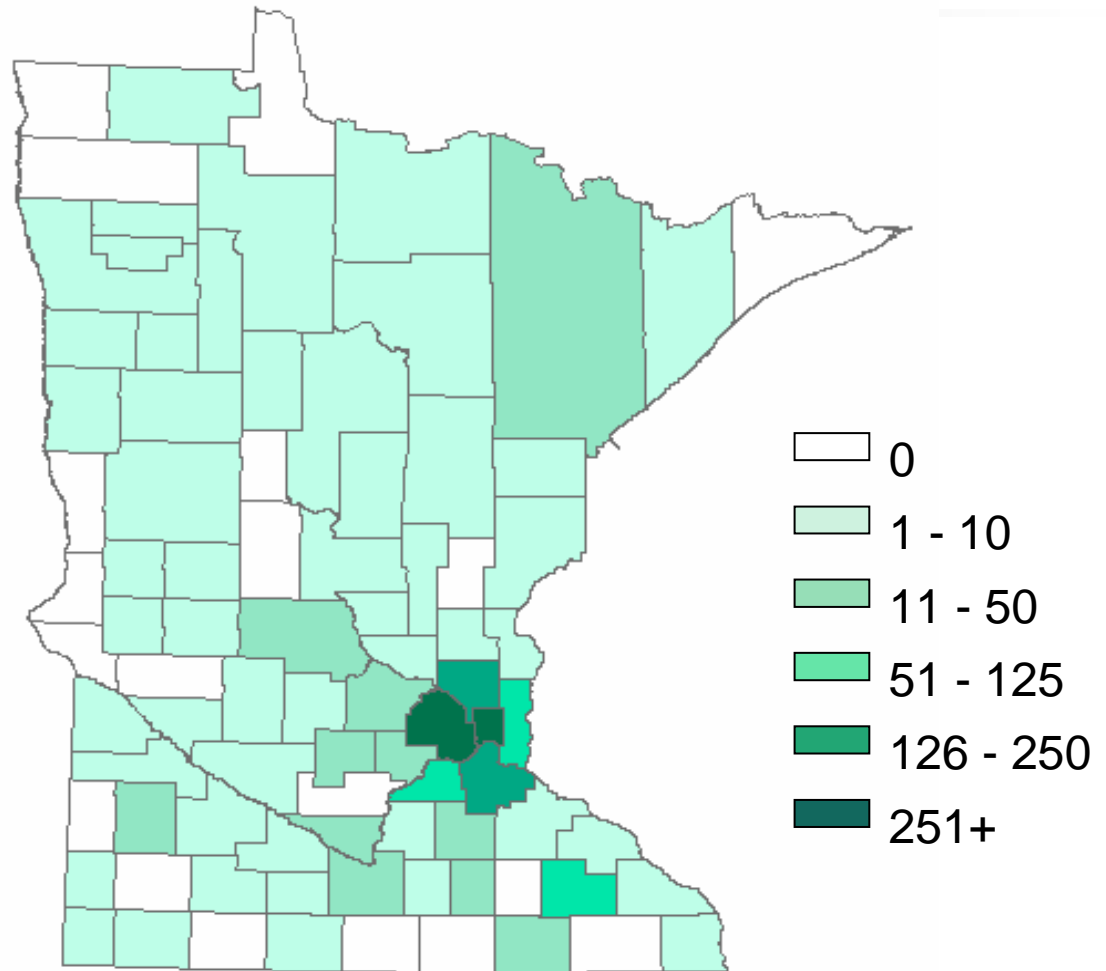
U.S.A.: Native American, Afro-
American

Infants Case Managed in Minnesota 1997-2005



Distribution of Cases in Minnesota

- Distribution of cases of infants born to women who are HBsAG positive by county from 1991-2006



Innovative Aspects of the Minnesota Perinatal Hepatitis B Program



Woman in Mirror, Pablo Picasso, 1932



Introductory Summary of Perinatal Program

- Decentralization of program
- Advisory committee
- Reimbursement
- Gift cards
- Public health strategies

Decentralization of Program

- Key aspect of Minnesota's program is the delegation of case management to the local public health agencies

- Minnesota Factoid #3: Did you know the coldest temperature recorded in Minnesota was -41 degrees?



January 1988—not including wind chill

Wikipedia



Advisory committee

- Comprised of perinatal public health nurses (Phn's)
- Currently represented by 10 counties
 - Counties with highest case loads
- Meetings occur twice a year



Reimbursement

- Hennepin and Ramsey counties are given a lump sum up front every year to do case management
- Counties with fewer cases are reimbursed \$500.00 for each case
 - Reimbursements are quarterly and can be given in increments
 - Household contacts \$60.00
 - HBV 1 & HBIG \$120.00
 - HBV 2 \$100.00
 - HBV 3 \$100.00
 - Serology \$120.00

A decorative graphic on the left side of the slide, featuring overlapping yellow, red, and blue squares with a black crosshair.

Gift cards

- Gift card incentive program was started in 2004
- Target gift cards distributed to Phn's in counties with high volumes of families to manage
- Gift cards are given to families when infant is brought in to clinic for appointments

Public Health Strategies for Case Management and Tracking

- Maslow's hierarchy of needs
 - Basic family needs addressed first



Public Health Strategies for Case Management and Tracking

■ Contact with families

- Initiated prior to delivery
- Investment of time with initial contact builds nurse/client trust
- In person vs. via phone
- Usually done at clinic visit or through WIC
- Limited contact in the home or community

- Minnesota Factoid #4: Did you know that the Mississippi River starts in Itasca State Park in northwest Minnesota?





Public Health Strategies for Case Management and Tracking

- Contact with clinics
 - PHN's cultivate relationship with providers
 - Families receive more consistent information

- Tracking Strategies
 - Postmaster letter
 - MIIC Registry
 - School systems
 - Physicians of infants, siblings and mother



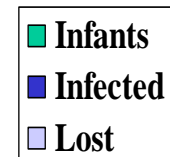
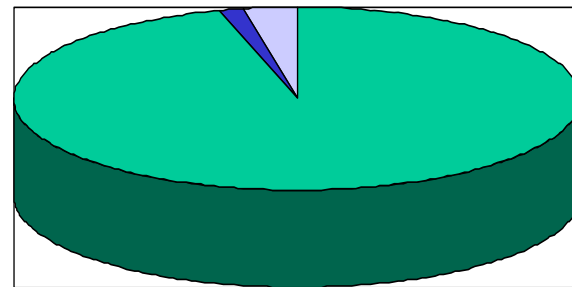
Vision for the Future



Visionary, Mary Dignam, 1989

Performance Improvement

- In 2005
 - six infants became infected with HBV despite vaccination
 - 14 infants did not complete case management
 - 8 infants not located
 - 5 parental refusals to finish series
 - 1 infant death



N=436

Future Activities to Address Areas for Improvement

- PHN's initiating contact with families during pregnancy
- Working with birthing hospitals to start or maintain universal birth dose programs
- Provider education to:
 - Improve reporting
 - Encourage referral to Hepatology for treatment of pregnant women to decrease vertical transmission
 - Ensure appropriate care and follow up of infant

Minnesota Factoid #5: Did you know that the Minnesota Twins Baseball Team is going to win the 2007 world series?

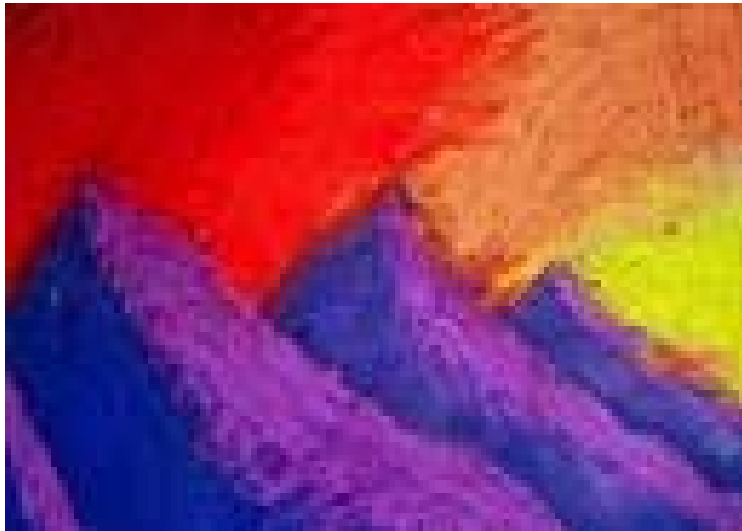




Conclusions

- Minnesota's population of HBsAg positive mother's is racially and culturally diverse
- Minnesota's perinatal program has a high percentage rate of completion in infants that are case managed
- Minnesota utilizes local public health nursing agencies for a more personal approach to case management
- Currently evaluating referral and treatment of HBsAg positive mother's to decrease vaccine failure

THE END



Days End, Ken Rossi, 2002

- SPECIAL THANKS TO THE FOLLOWING INDIVIDUALS FOR THEIR HELP AND SUPPORT WITH THIS PRESENTATION:

- Lisa Jacques-Carroll
- Margaret Roddy
- Susan Turner
- Susan Crowley
- Kristin Sweet
- Teresa Schillo